

Title (en)  
Steering system with variable transmission ratio

Title (de)  
Überlagerungs-Lenksystem

Title (fr)  
Système de direction à démultiplication variable

Publication  
**EP 2159134 B1 20130703 (EN)**

Application  
**EP 09169272 A 20090902**

Priority  
JP 2008224894 A 20080902

Abstract (en)  
[origin: EP2159134A2] Steering system which does not cause the driver to feel the steering reactive force shock when the operation of the steering wheel is stopped, and which enables the driver to operate the steering wheel comfortably. In order to achieve the above object, there is provided a steering system in which a transfer ratio of a steering angle of a steering wheel to a turning angle of a turning wheel is changed by a variable transfer ratio mechanism, and an auxiliary power is generated during steering by an electric power steering, including: a transfer ratio variable motor for changing the transfer ratio, in which a steering angular velocity of the steering wheel is calculated, and when an absolute value of the steering angular velocity becomes equal to or less than a predetermined value, a current value flowing through the transfer ratio variable motor is set to zero.

IPC 8 full level  
**B62D 6/00** (2006.01); **B62D 5/00** (2006.01); **B62D 5/04** (2006.01); **B62D 101/00** (2006.01); **B62D 113/00** (2006.01); **B62D 119/00** (2006.01); **B62D 137/00** (2006.01)

CPC (source: EP US)  
**B62D 5/008** (2013.01 - EP US); **B62D 5/046** (2013.01 - EP US); **B62D 6/002** (2013.01 - EP US)

Cited by  
EP3072783A1; US9828021B2; JPWO2016072143A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2159134 A2 20100303**; **EP 2159134 A3 20100526**; **EP 2159134 B1 20130703**; JP 2010058598 A 20100318; JP 5171487 B2 20130327; US 2010070137 A1 20100318; US 8775025 B2 20140708

DOCDB simple family (application)  
**EP 09169272 A 20090902**; JP 2008224894 A 20080902; US 55199309 A 20090901